

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number  
**WO 2005/051811 A1**

(51) International Patent Classification<sup>7</sup>: **B65G 43/00**

(21) International Application Number:  
PCT/US2003/034258

(22) International Filing Date: 29 October 2003 (29.10.2003)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

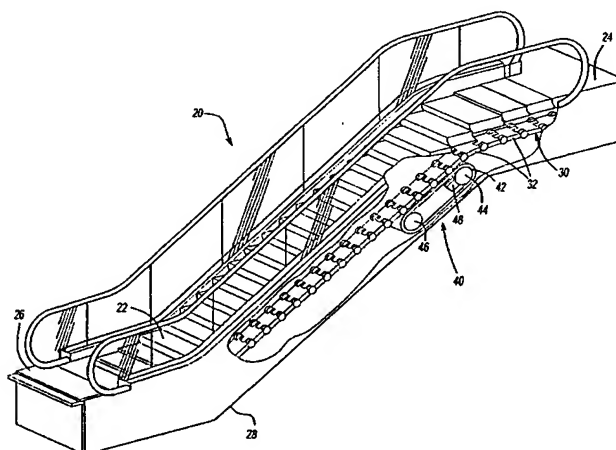
— of inventorship (Rule 4.17(iv)) for US only

**Published:**

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **PASSENGER CONVEYOR DRIVE MONITORING ARRANGEMENT WITH BRAKE ACTUATION**



(57) Abstract: A passenger conveyor drive assembly (40) includes drive members such as belts (42) that engage a step chain (30). A monitoring device (50) provides an indication of a damaged or broken drive member (42) by monitoring the relative rotations between wheels (44, 46). In one example, relative rotation between deflection wheels (46) provides an indication that one of the drive members (42) is not performing as well as the other. In another example, a comparison between the speed of rotation of the drive wheels (44) on the one hand and the deflection wheels (46) on the other hand allows for independently monitoring each of the drive members (42) of the drive assembly. In a disclosed embodiment, the monitoring device includes rotating members (52, 56) that normally rotate in unison and move into another position when there is relative rotation between the selected wheels. Such movement provides an indication of a malfunction of the drive system and may actuate the brake as needed.

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